Commonwealth of Virginia Title V Operating Permit

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Norfolk and Western Railway Company	Registration No.:	20468
Facility Name:	Norfolk and Western Railway Company – East End Shops	AFS ID Number:	51-161-0083
Facility Location:	Along East Campbell Avenue, Roanoke, Virginia	Permit Number:	VA-20468

October 7, 2003October 7, 2003Issue DateEffective Date

October 8, 2008
Expiration Date

Robert G. Burnley Signature Date
Director, Department of Environmental Quality

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I. Facility Information

Permittee

Norfolk and Western Railway Company 110 Franklin Road, S.E. Roanoke, VA 24019

Facility

Norfolk and Western Railway Company -East End Shops Along East Campbell Avenue Roanoke, Virginia

Responsible Official

L. D. Hale, Jr. Assistant Vice President Mechanical

Contact Person

Gibson V. Barbee, III Engineer Environmental Design (540) 981-5185

Registration Number: 20468

AIRS Identification Number: 51-161-0083

Facility Description: SIC Code 4011 – Norfolk and Western Railway Company operates a rail car and locomotive maintenance facility known as the East End Shops, which has been in existence since the 1880's. Operations are divided into three major departments, each with its own personnel, management and facilities: the Car Shop, Locomotive Shop and Signal Shop. Other operations associated with the maintenance and repair facilities include the coal-fired steam plant, laboratory and storage tanks.

The Car Shop performs rail car component fabrication, finishing, repair, abrasive blasting, painting, stenciling, and rebuilding of railroad hopper and gondola cars. Major operations include the Freight Car Shop and Fabrication building, Main Car Paint Shop, Prep Building with paint room (Specialty Car Shop), Old Paint Shop building, Reclamation Shop, Foundry and Pattern Shop, Blacksmith Shop, Planing Mill, old Passenger Car Shop, various storage tanks, and miscellaneous operations.

The Locomotive Shop performs major engine overhauls and rebuilding of locomotives. The primary operations are located in the main Locomotive Shop building, the Fabrication and Tin Shops, the Oil-Water Separator area, and a small Paint Shop.

The Signal Shop consists of a single building housing the signaling equipment repair facilities. The Signal Shop contains areas for storage of materials, welding, electronic repairs, equipment calibration, equipment painting and assembly.

The plant is by definition a Title V major source due to potential emissions of criteria pollutants PM-10, sulfur dioxide, nitrogen oxides, volatile organic compounds and carbon monoxide in excess of 100 tpy. It is located in an attainment area for criteria pollutants, and is a PSD major source. A PSD permit was issued to the facility in 1984, to construct and

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operate Boiler 4 (reissued June 18, 2001). All four boilers predate NSPS - 40 CFR 60 Subpart Dc applicability. One spray booth (51-01) is subject to the record keeping requirements (only) of a MACT regulation, 40 CFR 63 Subpart JJ, as its throughput is limited to the level of an "incidental wood furniture manufacturer" according to that regulation. No alternative operating scenarios have been requested.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burnii	ng Equipm	ent			_	_	
8-01	Boiler 1S – 2S	B&W Sterling coal-fired boiler	82.6 x 10 ⁶ BTU/hr	Belco Pollution Control Model 30 hot dry ESP	Boiler 1SA - 2SA	Particulate	4/2/84 (PSD permit) (reissued 6/18/01)
8-02	Boiler 1S – 2S	B&W Sterling coal-fired boiler	82.6 x 10 ⁶ BTU/hr	Belco Pollution Control Model 30 hot dry ESP	Boiler 1SA - 2SA	Particulate	4/2/84 (PSD permit) (reissued 6/18/01)
8-03	Boiler 1S – 2S	B&W Sterling coal-fired boiler	82.6 x 10 ⁶ BTU/hr	Belco Pollution Control Model 30 hot dry ESP	Boiler 1SA – 2SA	Particulate	4/2/84 (PSD permit) (reissued 6/18/01)
8-04	Boiler 1S – 2S	Zurn Energy spreader stoker coal-fired boiler	82.6 x 10 ⁶ BTU/hr	Belco Pollution Control Model 30 hot dry ESP	Boiler 1SA - 2SA	Particulate	4/2/84 (PSD permit) (reissued 6/18/01)
29-02 (see also under Locomotive Shop, below)	29-02S	Locomotive Shop - Bayco natural-gas fired oven, Model BB 413 burnoff oven	2.91 x 10 ⁶ BTU/hr	Bayco H13 burner	29-02A	Particulate	5/20/98
43-03 (see also under Car Shop, below)	Unknown	Blacksmith Shop - 15 open- front oil-fired metal heating furnaces	2.7 x 10 ⁶ BTU/hr (each); 40.5 x 10 ⁶ BTU/hr (total)	-	-	-	-

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process A -	- Car Shop						
37-01	37-01S	Prep Building – Wheelabrator Frye blasting booth	2.1 MCF air/hr output	Cyclone followed by Vacublast J3091 shaker baghouse	37-01B	Particulate	1/26/99
37-04	37-04S	Prep Building – enclosed area used for painting rail cars	Unknown	Closed room (60'L x 25'W x 20'H)	Unknown	Particulate	-
41-01	41-01S	New Paint Shop – Wheelabrator Frye Model 171 shot blast booth	2 railcars/hr output	Wheelabrator Frye Model 171 shaker baghouse	41-01B	Particulate	6/30/95, as amended 1/19/96 & 6/14/01
41-02	41-02 1S-6S	New Paint Shop – DeVilbiss paint booth	29 gal/hr output	DeVilbiss water curtain	NA	Particulate	6/30/95, as amended 1/19/96 & 6/14/01
41-04	Unknown	New Paint Shop – Stencil area	7 gal/hr output	-	-	-	6/30/95, as amended 1/19/96 & 6/14/01
41-05	Unknown	New Paint Shop – Cleaning and Purging Operations	Unknown	-	-	-	6/30/95, as amended 1/19/96 & 6/14/01
42-04	42-04S	Maintenance Building – Binks 10'-0" Andreae filter booth, floor type, Model PFA-10-10T-LH	10.2 gal/hr input using 0.013 tip	-	-	-	3/10/98 as amended 6/13/01
43-03 (see also under Fuel Burning Equipment, above)	Unknown	Blacksmith Shop – 15 open- front, metal heating furnaces, each with 2.7 x 10 ⁶ BTU/hr oil burner	40.5 x 10 ⁶ BTU/hr (total); process rate unknown	-	-	-	-
51-01	51-01S	Foundry – Pattern Shop - Binks spray booth	0.92 gal/hr input	Paper filter	Unknown	Particulate	12/18/98

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process A -	- Car Shop	(continued)					
51-08	51-08S	Foundry – New sand unloading, storage & transfer – Contech Dense Air Conveyor, Model 301- 768-6037, and 100 ton storage hopper	1.9 tons/hr input	Carborundum Environmental Systems, Model 540 HP 1015 TWS pulse- jet baghouse	51-08B	Particulate	5/4/98 as amended 7/16/03
51-09	51-08S	Foundry – Sand reclamation system – Hewitt-Robins 6 x 8 deck shaker, Hewitt- Robins 6 x 8 ball mill crusher and attrition mill, 50 ton feeding hopper, 200 ton storage hopper,	9.45 tons/hr input	Carborundum Environmental Systems, Model 540 HP 1015 TWS pulse- jet baghouse	51-08B	Particulate	5/4/98 as amended 7/16/03
51-10	Unknown	Foundry – Casting shakeout using mold shaker	3.75 tons/hr input	Fabric filters	Unknown	Particulate	5/4/98 as amended 7/16/03
51-11	51-11S	Foundry – Wheelabrator 550 shot blast machine	13,250 cu. ft/hr	Wheelabrator Frye Jet III pulse-jet baghouse	51-11B	Particulate	5/8/98 as amended 7/16/03
51-12	Unknown	Foundry - Lime hopper	0.38 tons/hr input	-	-	-	-
51-13/14	Unknown	Foundry – 13 ton capacity electric arc furnace (melting, charging, tapping & slagging) with 3 carbon electrodes	6.5 tons/hr input	-	-	-	-
51-15	Unknown	Foundry – Pouring and casting	5 tons/hr output	-	-	-	-
51-16	Unknown	Foundry – Charge handling	5 tons/hr output		-	-	-

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Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process A -	- Car Shop	(continued)					
51-17	Unknown	Foundry – Castings cooling	5 tons/hr output	-	-	-	-
51-19	Unknown	Foundry – Continuous Sand Mixer (large) – CE Cast Industrial Products N&W #8761	28.5 tons/hr input	Fabric filters	Unknown	Particulate	5/4/98 as amended 7/16/03
51-20	Unknown	Foundry – Continuous Sand Mixer (small) – CE Cast Industrial Products N&W #9717	16.5 tons/hr input	Fabric filters	Unknown	Particulate	5/4/98 as amended 7/16/03
59-04	Unknown	Bolster Reclamation Shop – Ring and gib welding using 3/32 innershield NS-3M wire and 309L-GSF16 stainless wire	52,000 lbs rods/yr input	-	-	-	-
Process B -	Locomotiv	ve Shop					
8-05 (Ash)	8-05A-S 8-05B-S	Ash handling system	3.33 tons/hr	Cyclone; 82 bag pulse-jet baghouse followed by Mikro-Pulsaire Model 88 pulse-jet baghouse; wet suppression when bins removed	08-05A 08-05B	Particulate	-
9-01	Unknown	Coal unloading	10.77 tons/hr input	_	-	-	_
9-02	Unknown	Coal transfer and handling	10.77 tons/hr input	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity [*]	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Process B –	Process B – Locomotive Shop (continued)						
28-01	Unknown	Fabrication and Tin Shop – General welding – Lincoln 7018, E3081, 3/32 Jetweld LH-70, Hobart 418 rods	40 lbs rods/hr input	-	-	-	-
29-01	29-01S	Locomotive Shop – DeVilbiss Paint Arrestor Type Paint Booth, Model #DL-L-1689-100	4.21 gal/hr input	Corrugated paper filter	Unknown	Particulate	9/27/99 as amended 6/15/01
29-02 (see also under Fuel Burning Equipment, above)	29-02S	Locomotive Shop - Bayco Model BB 413 burnoff oven	5.4 lb/hr waste input	Bayco H13 burner	29-02A	Particulate	5/20/98
29-06	29-06S	Locomotive Shop – Blast Cleaning Products (BCP) shot blast machine	2.4 x 10 ⁵ cu. ft. of air/hr output	BCP pulse-jet baghouse	29-06B	Particulate	2/27/98
Process C -	Process C – Signal Shop						
67-02	67-02S	Signal Shop – DeVilbiss bench top spray booth	0.39 gal/hr input	Paper filter	Unknown	Particulate	-

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – Boilers 1, 2, 3 and 4

A. Limitations

- 1. **Fuel -** The approved fuel for the boilers is coal. A change in the fuel may require a permit to modify and operate.

 (9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-170-160 and C. 7 of 4/2/84 PSD Permit as amended 6/18/01)
- Emission Controls Particulate emissions from the four boilers shall be controlled by the use of electrostatic precipitators.
 (9 VAC 5-80-110, 9 VAC 5-50-260 and C. 3 of 4/2/84 PSD Permit as amended 6/18/01)
- 3. **Fugitive Dust Emission Controls** Fugitive dust controls shall include the following, or equivalent, as a minimum:
 - a. Dust from material handling and load-outs shall be controlled by wet suppression or equivalent (as approved by the DEQ). The wet suppression spray systems shall be operated at optimum design, and pressure gauges or flow meters shall be installed (with adequate access for inspection of the measuring device) to indicate system operating pressures or flow rates.
 - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
 - c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods as approved by the DEQ.
 - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have clean wheels achieved by use of a wheel washer or equivalent. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-20, 9 VAC 5-50-90 and C. 4 of 4/2/84 PSD Permit as amended 6/18/01)

- 4. **Operating Limits** The boiler house may at no time be operated at a level above 210,000 lb/hr steam output. This level is consistent with the maximum design capacity of the boiler house (247.8 x 10⁶ BTU/hr) at the time of the permit application for the 4/2/84 permit and is the basis of the conditions listed in that permit. (9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-170-160 and C.6 of 4/2/84 PSD Permit as amended 6/18/01)
- 5. **Fuel Specifications -** Coal ash content is limited to an annual average of 20 percent. (9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-170-160 and C. 8 of 4/2/84 PSD Permit as amended 6/18/01)
- 6. **Fuel Specifications -** The sulfur content of the coal may not exceed 1.5 percent nor may the annual average exceed 1.0 percent. If coal for spreader stoker fuel with an annual average sulfur content of 1.0 percent becomes unavailable in this area, the annual average sulfur content may increase to no more than 1.25 percent during such period.

(9 VAC 5-80-110 , 9 VAC 5-80-10 H, 9 VAC 5-170-160 and C. 9 of 4/2/84 PSD Permit as amended 6/18/01)

7. **Fuel Specifications -** The sulfur content of the four-week rolling average, as referenced in Condition III.B.1 (Monitoring and Record keeping) below, shall not exceed 1.25 percent. The sulfur content of any individual weekly analysis shall not exceed 1.5 percent.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-170-160 and C. 10 of 4/2/84 PSD Permit as amended 6/18/01)

8. **Emission Limits** - Emissions from the operation of the four boilers (total) shall not exceed the limits specified below:

Particulate Matter 56.5 lbs/hr

0.228 lbs/million BTU input hourly emission limit

PM-10 56.5 lbs/hr

0.228 lbs/million BTU input hourly emission limit

Sulfur Dioxide 523.1 lbs/hr

2.11 lbs/million BTU input hourly emission limit

During a period when the annual average sulfur content has increased above 1.0 percent, as referenced in Condition III.A.6. above, the annual sulfur dioxide emissions shall not exceed 1909 tons per year at allowable capacity, as referenced in Condition III.A.4 above.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-280 and C. 11 of 4/2/84 PSD Permit as amended 6/18/01)

- 9. **Visible Emission Limit** Visible emissions from each of the boiler stacks, 1S and 2S, shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 (30%) percent opacity. (9 VAC 5-50-80, 9 VAC 5-80-110, 9 VAC 5-50-290 and C. 12 of 4/2/82 PSD Permit as amended 6/18/01)
- 10. **Operation and Maintenance** Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. (9 VAC 5-80-110)

B. Monitoring and Record keeping

- 1. **Monitoring** One grab sample of coal shall be taken for each boiler once per day. The sample point shall be located immediately preceding the boiler feed points. These samples shall be combined and stored and a sulfur content analysis performed once per week. Each week, the four (4) preceding weekly analysis results shall be averaged (calculated weekly as the average of each consecutive four week period). The analyses shall meet the requirements of ASTM Method D3177-75 (sulfur content) or a DEQ-approved equivalent method. The approved procedure for collecting the samples shall list all pertinent information regarding sample size, where sample is taken, etc.
 - (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 13 of 4/2/84 PSD Permit as amended 6/18/01)
- 2. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the boilers and related air pollution control equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boilers and electrostatic precipitators.
 - b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boilers and electrostatic precipitators, and maintain records of inspection results.

- and electrostatic
- c. Have available written operating procedures for the boilers and electrostatic precipitators. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
- d. Train operators in the proper operation of the boilers and electrostatic precipitators and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110 and 9 VAC 5-50-20 E)

- 3. **Fuel Certifications** The permittee shall obtain a certification, or alternative statement, from the fuel supplier covering each shipment of coal. Each fuel supplier certification or alternative statement shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the coal was received,
 - c. The volume of coal delivered in the shipment,
 - d. The sulfur content of the coal, to be determined according to ASTM D3177-75 "Standard Test Method for Total Sulfur of Coal and Coke" or a DEQ-approved equivalent method, and
 - e. The ash content of the coal, to be determined according to ASTM D3174-89 "Standard Test Method for Ash in the Analytical Sample of Coal and Coke from Coal" or a DEQ-approved equivalent method.

(9 VAC 5-80-110 and 9 VAC 5-170-160)

- 4. **On-Site Records** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. The monthly and annual throughput of coal (in tons) for the boilers. The annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. The steam output of the boiler house.

- c. The results of the fuel sulfur content analyses, as referenced in Condition III.B.1 above.
- d. All fuel supplier certifications or alternative statements.
- e. The annual emissions of sulfur dioxide, calculated monthly as the sum of each consecutive twelve (12) month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and C. 14 of 4/2/84 PSD Permit as amended 6/18/01)

C. Testing

1. **Test Methods** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO ₂	EPA Method 6
PM/PM-10	EPA Method 5, 17, 201, 201A
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

IV. Fuel Burning Equipment Requirements – 43-03 (15 open-front oil-fired metal heating furnaces)

A. Limitations

1. **Fuel -** The approved fuel for the metal heating furnaces is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110)

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2. **Emission Limits** - Emissions from the operation of the metal heating furnaces shall not exceed the limits specified below:

Particulate Matter 0.4175 lbs/million BTU input

PM-10 0.4175 lbs/million BTU input

Sulfur Dioxide 2.64 lbs/million BTU input hourly emission limit

(9 VAC 5-80-110, 9 VAC 5-40-900 A 1 and 9 VAC 5-40-930 A)

3. **Visible Emission Limits** - Visible emissions from the metal heating furnace stack(s) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%) opacity. (9 VAC 5-40-80, 9 VAC 5-80-110 and 9 VAC 5-40-940)

4. **Operating Practices** - Furnace emissions shall be controlled by proper operation and maintenance. Furnace operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. (9 VAC 5-80-110)

B. Monitoring and Record keeping

- 1. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the metal heating furnaces:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the furnaces.
 - b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the furnaces, and maintain records of inspection results.
 - c. Have available written operating procedures for the furnaces. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
 - d. Train operators in the proper operation of the furnaces and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110 and 9 VAC 5-40-20E)

- 2. **Fuel Specifications** The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The volume of distillate oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
 - e. The sulfur content of the oil.

(9 VAC 5-80-110)

- 3. **On Site Records** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. The monthly and annual throughput of distillate oil (in 1000 gallons) for the furnaces. The annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. All fuel supplier certifications.
 - c. The sulfur content of the oil burned in the furnaces.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50 and 9 VAC 5-80-110)

C. Testing

1. **Test Methods** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO_2	EPA Method 6
PM/PM-10	EPA Method 5, 17, 201, 201A
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

V. Process Equipment Requirements – Car Shop

A. Limitations

1. **Emission Controls** - Particulate emissions from the shot blast machine (37-01) shall be controlled by a cyclone followed by a fabric filter. The fabric filter shall be provided with adequate access for inspection. The fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the dust collector. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times. An annual internal inspection shall be conducted on the cyclone by the permittee to insure structural integrity.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 1/26/99 Permit)

2. **Emission Controls** - Particulate emissions from the shot blast booth (41-01) shall be controlled by a baghouse. The baghouse shall be provided with adequate access for inspection. The baghouse shall be equipped with a device to continuously measure the differential pressure drop through the baghouse. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 4 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

3. **Emission Controls** - Particulate emissions from the spray booth (41-02) shall be controlled by a water curtain. The water curtain shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 6/30/95 Permit, as amended 1/19/96, as amended 1/19/96 & 6/14/01)

4. **Emission Controls** - Particulate emissions from the spray booth (42-04) shall be controlled by pocket filters. The filters shall be provided with adequate access for inspection.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 3/10/98 Permit as amended 6/13/01)

5. Emission Controls - Particulate emissions from the spray booth (51-01) shall be controlled by corrugated paper filters. The filters shall be provided with adequate access for inspection. The filters shall be equipped with a device to continuously measure the differential pressure drop across the filters. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 12/18/98 Permit)

- 6. **Emission Controls / Monitoring Device** Particulate emissions from the sand handling and mold making operation (51-08, 51-09, 51-10, 51-19, 51-20), with the exception of storage bin vents, shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The devices shall be installed in an accessible location and shall be maintained by the permittee such that they are in proper working order at all times.

 (9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 5/4/98 Permit as amended 7/16/03)
- 7. **Monitoring Device Observation** The control monitoring devices used to continuously measure the pressure drop across the baghouse fabric filter shall be observed by the permittee with a frequency sufficient to ensure good performance of the baghouse. The permitee shall keep a log of the observations from the control monitoring device.

(9 VAC 5-50-50 F and C.4 of 5/4/98 Permit as amended 7/16/03)

8. **Emission Controls** / **Monitoring Device** - Particulate emissions from the shot blast booth (51-11) shall be controlled by a fabric filter pulse jet dust collector. The dust collector shall be provided with adequate access for inspection. The dust collector shall be equipped with a device to continuously measure the differential pressure drop across the dust collector. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times.

(9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and C. 3 of 5/8/98 Permit)

- 9. **Emission Controls** Volatile organic compound (VOC) emissions from the spray booth (41-02) shall be controlled by use of high-solids coatings and airless spray guns. (9 VAC 5-80-110, 9 VAC 5-40-4790 and C. 5 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)
- 10. **Emission Controls** Volatile organic compound (VOC) emissions from cleaning or purging operations (41-05) shall be minimized by adjustment of production schedules to minimize coating changes.

(9 VAC 5-80-110, 9 VAC 5-40-4780 and C. 6 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

11. **Operating Procedures** - The shot blast booth (51-11) shall be operated at a negative pressure of 0.10 psia relative to the ambient air at all times when the blast machine is in operation.

(9 VAC 5-80-110, 9 VAC 5-40-90 and C. 7 of 5/8/98 Permit)

12. **Operating Procedures** - The disposal of collected particulate from the shot blast booths (37-01 and 51-11) shall be performed in a manner which minimizes the introduction of air contaminants to the ambient air.

(9 VAC 5-80-110, 9 VAC 5-40-90, C. 7 of 1/26/99 Permit and C. 8 of 5/8/98 Permit)

- 13. **Operating Procedures** Volatile organic compound emissions from use of all coatings in the spray booth (41-02) are limited to 2.8 lb VOC/gal as a monthly average. (9 VAC 5-80-110, 9 VAC 5-50-260 and C. 8 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)
- 14. **Throughput -** The volatile organic compound throughput for the spray booths (41-02), stencil painting area (41-04) and associated cleaning (41-05) shall not exceed 88.15 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110 and C. 7 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)
- 15. **Throughput** The annual throughput of ceramic facing shall not exceed 37,500 gallons, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 5 of 5/4/98 Permit as amended 7/16/03)
- 16. **Throughput -** The annual throughput of molding catalyst shall not exceed 53,900 gallons, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 6 of 5/4/98 Permit as amended 7/16/03)
- 17. **Throughput -** The annual throughput of molding binder shall not exceed 218,000 gallons, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110, 9 VAC 5-80-170-160 and C. 7 of 5/4/98 Permit as amended 7/16/03)
- 18. **Throughput -** The annual throughput of sand shall not exceed 68,100 tons, calculated monthly as the sum of each consecutive twelve (12) month period. Sand throughput shall be calculated according to the following equation:

Sand throughput in tons = 2.52(F), where F = tons of finished steel poured

(9 VAC 5-80-110, 9 VAC 5-170-160 and C. 8 of 5/4/98 Permit as amended 7/16/03)

19. **Throughput -** The monthly throughput of coatings or adhesives in the spray booth (51-01) shall not exceed 100 gallons.

(9 VAC 5-80-110, 9 VAC 5-170-160, Condition 5 of 12/18/98 Permit and 40 CFR 63.800 [Subpart JJ] of Federal Regulations)

- 20. **Visible Emission Limit -** Visible emissions from the shot blast booth (37-01) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-50-80, 9 VAC 5-50-290, 9 VAC 5-170-160, 9 VAC 5-50-50, 9 VAC 5-80-110 and C. 5 of 1/26/99 Permit)
- 21. **Visible Emission Limit -** Visible emissions from the spray booth (37-04) and from ring and gib welding (59-04) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%) opacity.

 (9 VAC 5-40-80 and 9 VAC 5-80-110)
- 22. **Visible Emission Limit -** Visible emissions from the spray booth (41-02) and the shot blast booth (41-01) shall not exceed 5 percent (5%) opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity.

 (9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-20 and C. 12 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)
- 23. **Visible Emission Limit -** Visible emissions from the spray booth (51-01) shall not exceed 5 percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-20 and C. 7 of 12/18/98 Permit)
- 24. **Visible Emission Limit -** Visible emissions from the baghouses for the sand handling and mold making operations shall not exceed 5 percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity.

 (9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-90, 9 VAC 5-50-20 and C. 10 of 5/4/98 Permit as amended 7/16/03)
- 25. **Visible Emission Limit -** Visible emissions from the shot blast booth (51-11) shall not exceed 10 percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-20 and C. 5 of 5/8/98 Permit)
- 26. **Emission Limits -** Emissions from the operation of the shot blast booth (37-01) shall not exceed the limits specified below:

Particulate Matter 0.020 gr/dscf 5.88 lbs/hr 25.75 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 4 of 1/26/99 Permit)

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27. **Emission Limits -** Emissions from the operation of the shot blast booth (41-01) shall not exceed the limits specified below:

Particulate Matter 1.7 lbs/hr 3.4 tons/yr

PM-10 1.3 lbs/hr 3.4 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 11 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

28. **Emission Limits -** Emissions from the operation of the spray booth (41-02) shall not exceed the limits specified below:

Particulate Matter 51.9 lbs/hr 75.5 lbs/day 12.5 tons/yr
PM-10 38.9 lbs/hr 75.5 lbs/day 9.4 tons/yr
Volatile Organic 168.0 lbs/hr 84.0 tons/yr

Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 9 of 6/30/95 Permit, as amended 1/19/96& 6/14/01)

29. **Emission Limits** - Emissions from the operation of the stencil painting (41-04) and cleaning operations shall not exceed the limits specified below:

Particulate Matter 2.6 lbs/hr 3.5 tons/yr

PM-10 2.0 lbs/hr 2.6 tons/yr

Volatile Organic 2.6 lbs/hr 4.15 tons/yr Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 10 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

30. **Emission Limits -** Emissions from the operation of the spray booth (42-04) shall not exceed the limits specified below:

Particulate Matter 57.5 lbs/hr 4.95 tons/yr

Volatile Organic 73.9 lbs/hr 4.95 tons/yr

Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260 and C. 4 of 3/10/98 Permit as amended 6/13/01)

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31. **Emission Limits -** Emissions from the operation of the spray booth (51-01) shall not exceed the limits specified below:

Volatile Organic

6.05 lbs/hr

3.95 tons/yr

Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-20 and C .6 of 12/18/98 Permit)

32. **Emission Limits** - Emissions from the operation of the sand handling and mold making operation (51-08, 51-09, 51-10, 51-19, 51-20) shall not exceed the limits specified below:

Particulate Matter

9.17 lbs/hr

30.2 tons/yr

PM-10

3.54 lbs/hr

10.5 tons/yr

Volatile Organic

10.6 lbs/hr

43.6 tons/yr

Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260 and C. 9 of 5/4/98 Permit as amended 7/16/03)

33. **Emission Limits -** Emissions from the operation of the shot blast booth (51-11) shall not exceed the limits specified below:

Particulate Matter

0.020 gr/dscf

2.27 lbs/hr

9.95 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 4 of 5/8/98 Permit)

34. **Emission Limits -** Emissions from the operation of the electric arc furnace (51-13/14) shall not exceed the limits specified below:

Particulate Matter

19.43 lbs/hr

(9 VAC 5-80-110 and 9 VAC 5-40-2410 B)

35. **Emission Limits -** Emissions from pouring and casting, charge handling and castings cooling (51-15, 51-16, 51-17) shall not exceed the limits specified below:

Particulate Matter

12.05 lbs/hr

(9 VAC 5-80-110 and 9 VAC 5-40-260 A)

B. Monitoring and Record keeping

- 1. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20E, 9 VAC 5-50-20E)

2. **On Site Records -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual throughput (in gallons) of coatings, solvents, thinners and adhesives at each spray booth. Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. Monthly and annual throughput of sand, binder, catalyst and facing. Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- c. Average monthly VOC emissions (in pounds/gallon) from each spray booth.
- d. Monthly and annual VOC emissions (in pounds) from each spray booth. Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- e. The number of hours of operation of each spray booth.
- f. The number of rail cars painted at the facility. Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- g. A log of the observations from the control monitoring device(s) on the baghouse(s) in the sand handling and mold making operation.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, C. 13 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01, C. 6 of 3/10/98 Permit as amended 6/13/01, C. 10 of 5/4/98 Permit, C. 8 of 12/18/98 Permit, C. 4 of 5/4/98Permit as amended 7/16/03 and 40 CFR 63.800 [Subpart JJ] of Federal Regulations)

C. Testing

1. **Test Methods** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
VOC	EPA Methods 18, 25, 25a	
VOC Content	EPA Methods 24, 24a	
PM/PM-10	EPA Method 5, 17, 201, 201A	
Visible Emission	EPA Method 9	

D. Reporting

1. **Volatile Organic Compounds -** The permittee shall submit a report showing the annual throughput of VOC's for spray booth #41-02 according to a schedule to be arranged with the Director, West Central Regional Office (9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-80-10 and Condition 14 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

VI. Process Equipment Requirements – Locomotive Shop

A. Limitations

- 1. **Fuel** The approved fuel for the incinerator (29-02) primary and secondary burner is natural gas. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-110, 9 VAC 5-80-10 H and C. 12 of 5/20/98 Permit)
- 2. **Emission Controls** Particulate emissions from the spray booth (29-01) shall be controlled by mat filters. The filters shall be provided with adequate access for inspection and shall be in use when coatings are being applied. The spray booth shall be equipped with a device to continuously measure the differential pressure drop across the filters. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times.

 (9 VAC 5-80-110, 9 VAC 5-50-260 and C. 3 of 9/27/99 Permit as amended 6/15/01)
- 3. **Emission Controls** Particulate emissions from the shot blast booth (29-06) shall be controlled by a cartridge filter dust collector. The dust collector shall be provided with adequate access for inspection. The dust collector shall be equipped with a device to continuously measure the differential pressure drop across the cartridges. The device shall be installed in an accessible location and shall be maintained by the permittee such that is it in proper working order at all times.

 (9 VAC 5-80-110, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and Condition 3 of 2/27/98 Permit)
- 4. **Emission Controls** Volatile organic compound (VOC) emissions from the spray booth (29-01) shall be minimized by adjustment of production schedules to minimize coating changes.

 (9 VAC 5-80-110, 9 VAC 5-50-260 and C. 4 of 9/27/99 Permit as amended 6/15/01)
- 5. **Emission Controls** Volatile organic compound (VOC) emissions from cleaning or purging operations at the spray booth (29-01) shall be minimized by keeping the lid on the container holding the cleaner when the cleaning container is not in use. (9 VAC 5-80-110, 9 VAC 5-50-260 and C. 4 of 9/27/99 Permit as amended 6/15/01)

6. **Operating Procedures** - The primary and secondary chambers of the incinerator (29-02) shall be equipped with continuous temperature sensors at or near the chamber exits to indicate the temperatures in each chamber. (9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 11 of 5/20/98 Permit)

- 7. **Operating Procedures** The minimum primary and secondary chamber temperatures shall be maintained at 750 °F and 1200 °F, respectively, when the incinerator (29-02) is in operation, except for momentary dips when feeding a load of waste. (9 VAC 5-80-110, 9 VAC 80-10 H and C. 3 of 5/20/98 Permit)
- 8. **Operating Procedures** The incinerator (29-02) shall be equipped with automatic thermostats to maintain the minimum primary and secondary chamber temperatures. (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 4 of 5/20/98 Permit)
- 9. **Operating Procedures** The incinerator (29-02) shall remain in operation until such time that no combustible materials are left on the hearth. (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 5 of 5/20/98 Permit)
- 10. **Operating Procedures** The burn-down cycle of the incinerator (29-02) shall be automatically controlled and the minimum burn-down cycle time shall be eight (8) hours.

(9 VAC 5-80-110, 9 VAC 5-170-160 and C. 6 of 5/20/98 Permit)

11. **Operating Procedures** - The incinerator (29-02) shall be charged with no more than eighteen (18) jackets per cycle, and operated for no more than three (3) cycles per day.

(9 VAC 5-80-110, 9 VAC 5-170-160 and C. 7 of 5/20/98 Permit)

12. **Operating Procedures** - The disposal of collected particulate from the shot blast booth (29-06) shall be performed in a manner which minimizes the introduction of air contaminants to the ambient air.

(9 VAC 5-80-110, 9 VAC 5-40-90 and C. 7 of 2/27/98 Permit)

13. **Throughput** - The annual throughput of coatings in the spray booth (29-01) shall not exceed 3,745 gallons, calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-80-10 H and C. 6 of 9/27/99 Permit as amended 6/15/01)

14. **Throughput** - The volatile organic compound throughput for the spray booth (29-01) shall not exceed 18 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-80-10 H and C. 7 of 9/27/99 Permit as amended 6/15/01)

15. **Visible Emissions -** Visible emissions from the ash handling system (8-05), coal unloading (9-01), and coal transfer and handling (9-02) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity.

(9 VAC 5-50-80, 9 VAC 5-80-110 and 9 VAC 5-50-290)

16. **Visible Emissions -** Visible emissions from the spray booth (29-01) shall not exceed 5 percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent (10%) opacity.

(9 VAC 5-50-260, 9 VAC 5-80-110 and C. 9 of 9/27/99 Permit as amended 6/15/01)

17. **Visible Emissions -** Visible emissions from the incinerator (29-02) shall not exceed 5 percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-170-160, 9 VAC 5-50-20, 9 VAC 5-80-110 and C. 9 of 5/20/98 Permit)

- 18. **Visible Emissions -** Visible emissions from the shot blast booth (29-06) shall not exceed 10 percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-50-20, 9 VAC 5-170-160, 9 VAC 5-80-110 and C. 5 of 2/27/98 Permit)
- 19. **Emission Limits** Emissions from the ash handling system (8-05) shall not exceed the limits specified below:

Particulate Matter 9.18 lbs/hr

(9 VAC 5-80-110 and 9 VAC 5-40-260)

20. **Emission Limits** - Emissions from coal unloading (9-01) shall not exceed the limits specified below:

Particulate Matter 20.2 lbs/hr

(9 VAC 5-80-110 and 9 VAC 5-40-260)

21. **Emission Limits** - Emissions from coal transfer and handling (9-02) shall not exceed the limits specified below:

Particulate Matter 20.2 lbs/hr

(9 VAC 5-80-110 and 9 VAC 5-40-260)

22. **Emission Limits** - Emissions from the operation of the spray booth (29-01) shall not exceed the limits specified below:

Volatile Organic

31.0 lbs/hr

18.0 tons/yr

Compounds

(9 VAC 5-80-110, 9 VAC 5-50-260 and C. 8 of 9/27/99 Permit as amended 6/15/01)

23. **Emission Limits** - Emissions from the operation of the incinerator (29-02) shall not exceed the limits specified below:

Particulate Matter

0.10 gr/dscf @ 12% CO₂

PM-10

0.10 gr/dscf @ 12% CO₂

Nitrogen Oxides

1.7 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-180, 9 VAC 5-50-260 and C. 8 of 5/20/98 Permit)

24. **Emission Limits** - Emissions from the operation of the shot blast booth (29-06) shall not exceed the limits specified below:

Particulate Matter

0.020 gr/dscf

0.68 lbs/hr

2.97 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-180 and C. 4 of 2/27/98 Permit)

B. Monitoring and Record keeping

- 1. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

- d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20E, 9 VAC 5-50-20E)

- 2. **On Site Records** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. The monthly and annual throughput of steel jackets to the incinerator (29-02). Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - b. The monthly and annual throughput of natural gas for the incinerator (29-02). The annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - c. Monthly and annual throughput (in gallons) of coatings, solvents, thinners and adhesives at each spray booth. Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - d. Monthly and annual VOC emissions (in pounds) from each spray booth. Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.
 - e. The number of hours of operation of each spray booth.
 - f. Throughput of coal for the coal unloading, transfer and handling systems (09-01 & 09-02), calculated monthly as the sum of each consecutive twelve (12) month period.
 - g. Throughput of ash for the ash handling system (08-05), calculated monthly as the sum of each consecutive twelve (12) month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, C. 14 of 5/20/98 Permit and C. 11 of 9/27/99 Permit as amended 6/14/01)

C. Testing

1. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
VOC	EPA Methods 18, 25, 25a	
VOC Content	EPA Methods 24, 24a	
NO _x	EPA Method 7	
PM/PM-10	EPA Method 5, 17, 201, 201A	
Visible Emission	EPA Method 9	

(9 VAC 5-80-110)

VII. Process Equipment Requirements – Signal Shop

A. Limitations

- 1. **Visible Emissions** Visible emissions from the bench top spray booth (67-02) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity. (9 VAC 5-50-80, 9 VAC 5-80-110 and 9 VAC 5-50-290)
- 2. **Emission Controls** Spray booth emissions shall be controlled by proper operation and maintenance. Operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. (9 VAC 5-80-110)

B. Monitoring and Record keeping

- 1. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20E, 9 VAC 5-50-20E)

2. On Site Records - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50 and 9 VAC 5-80-110)

C. Testing

1. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
PM/PM-10	EPA Method 5, 17, 201, 201A	
Visible Emission	EPA Method 9	

(9 VAC 5-80-110)

VIII. Facility Wide Conditions

A. Monitoring and Record keeping

- 1. **Visible Emissions**: Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. Each emissions unit in the Method 22 technique observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least 3 six minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-110E)
- 2. **Permit Copies** The permittee shall keep a copy of each NSR permit / permit amendment, as listed in Section II Emission Units, on the premises of the facility to which it applies.

 (9 VAC 5-80-110, 9 VAC 5-170-60, C. 23 of the 4/2/84 PSD permit as amended 6/18/01, C. 22 of 5/20/98 Permit, C. 15 of 2/27/98 Permit, C. 4 of 12/18/98 Permit, C. 15 of 1/26/99 Permit, C. 14 of 3/10/98 Permit as amended 6/13/01, C. 16 of 5/8/98

Permit, C. 25 of 5/4/98 Permit as amended 7/16/03, C. 19 of 9/27/99 Permit as amended 6/15/01, C. 23 of 6/30/95 permit as amended 1/19/96 & 6/14/01)

3. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations when requested. (9 VAC 5-40-30, 9 VAC 5-50-30 F, 9 VAC 5-80-110, C. 5 of 4/2/84 PSD Permit as amended 6/18/01, C. 10 of 5/20/98 Permit, C. 16 of 12/18/98 Permit, C.11 of 5/4/98 Permit as amended 7/16/03)

IX. Insignificant Activities

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80- 720 C)
	Powerhouse – small shot blaster	9 VAC 5-80-720A	PM, PM-10	
	Powerhouse – Parts Cleaner	9 VAC 5-80-720A	VOC	
	Powerhouse – Diesel Generator	9 VAC 5-80-720A	NOx	1000 kW
54-01	Freight Car Shop – general welding	9 VAC 5-80-720A	PM, PM-10	
54-02	Freight Car Shop – grinding machines	9 VAC 5-80-720B	PM, PM-10	
54-03	Freight Car Shop – plasma arc cutter	9 VAC 5-80-720B	PM, PM-10	
54-04	Freight Car Shop – air arc welding	9 VAC 5-80-720B	PM, PM-10, HAPs	
55-01	Freight Car Shop – planing mill	9 VAC 5-80-720B	PM, PM-10	
41-03	New Paint Shop – drying booth (steam heat)	9 VAC 5-80-720C	VOC	NA
Bldg 41	New Paint Shop – small parts degreaser	9 VAC 5-80-720 A, B	VOC	
Passenger Car Shop	12 gal parts washer	9 VAC 5-80-720A	VOC	
Passenger Car Shop	34 gal parts washer	9 VAC 5-80-720A	VOC	
Bldg 43	Blacksmith Shop – alkaline cleaners (2)	9 VAC 5-80-720B	NA	
43-02	Blacksmith Shop –natural gas fired rivet mill furnace	9 VAC 5-80-720C		4.69 x 10 ⁶ BTU/hr
	Blacksmith Shop – Diesel Storage Tank	9 VAC 5-80-720A	VOC	15,000 Gallon
50-01	Old Paint Shop – parts washer	9 VAC 5-80-720 A, B	NA	
50-02	Old Paint Shop – 35 gal parts washer	9 VAC 5-80-720 A, B	VOC	
50-03	Old Paint Shop – misc. painting	9 VAC 5-80-720 A, B	VOC	
51-02	Foundry – natural gas-fired annealing oven – Therm- Craft, Model 20-8-5-1Z-GF	9 VAC 5-80-720C		7 burners @ 1 x 10 ⁶ BTU/hr each

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80- 720 C)
51-03	Foundry – natural gas-fired core oven	9 VAC 5-80-720C		3 x 10 ⁶ BTU/hr
51-04	Foundry – Tank 1 - molding binder tank (furfuryl alcohol)	9 VAC 5-80-720B	VOC, HAPs	
51-05	Foundry – Tank 2 -toluene sulfonic acid catalyst tank	9 VAC 5-80-720B	VOC, HAPs	
51-18	Foundry – natural gas-fired flame hardening system – Wisconsin Oven Corp., Model SN 030579206	9 VAC 5-80-720C		6 x 10 ⁶ BTU/hr
	Foundry – Small Shot Blasters (2)	9 VAC 5-80-720A	PM, PM-10	
	Foundry – parts Cleaner (Selig)	9 VAC 5-80-720A	VOC	
	Car Shop (Planning Mill) small shot blaster	9 VAC 5-80-720A	PM, PM-10	
	Car Shop (Reclamation) (2) small shot blasters	9 VAC 5-80-720A	PM, PM-10	
	Car Shop (Reclamation) (3) Parts Cleaners	9 VAC 5-80-720A	VOC	
	Car Shop (Reclamation) (3) Mart Parts Washers	9 VAC 5-80-720A	VOC	
	Car Shop (Passenger Car) Cuda Aqueous Parts Washer	9 VAC 5-80-720A	N/A	
1C	Car Shop - car oil tank	9 VAC 5-80-720C		8000 gal
2C	Car Shop - car oil tank	9 VAC 5-80-720C		8000 gal
3C	Car Shop - car oil tank	9 VAC 5-80-720C		8000 gal
5C	Car Shop – petroleum product tank < 1000 gallons	9 VAC 5-80-720A		
6C	Car Shop – petroleum product tank < 1000 gallons	9 VAC 5-80-720A		
12C	Car Shop – petroleum product tank < 1000 gallons	9 VAC 5-80-720A		
29C	Car Shop – petroleum product tank < 1000 gallons	9 VAC 5-80-720A	VOC	
30C	Car Shop – petroleum product tank < 1000 gallons	9 VAC 5-80-720A	VOC	
59-05	Locomotive Shop – general welding	9 VAC 5-80-720B	PM, PM-10	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80- 720 C)
Bldg 29	Locomotive Shop – steam drying ovens (2)	9 VAC 5-80-720A		
Bldg 29	Locomotive Shop –1800 gal Proceco (conveyor) washer	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – 1525 gal Stoelting (conveyor) washer	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – 500 gal Aja Lif (agitator) washer	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – 380 gal Mart washers (2)	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – 490 gal Aja Lif washers (2)	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – 170 gal Mart washers (2)	9 VAC 5-80-720A	VOC	
Bldg 29	Locomotive Shop – Parts Cleaners (Selig) (20)	9 VAC 5-80-720A	VOC	
Bldg 29	Small Shot Blasters (4)	9 VAC 5-80-720A	PM, PM-10	
Bldg 29	Locomotive Shop – Scrub Room – wand cleaner	9 VAC 5-80-720A		
1L	Locomotive Shop – used oil tank	9 VAC 5-80-720C		550 gal
2L	Locomotive Shop – engine lube oil tank	9 VAC 5-80-720B	VOC	
3L	Locomotive Shop – engine lube oil tank	9 VAC 5-80-720B	VOC	
4L	Locomotive Shop – Regal R&O 32 tank	9 VAC 5-80-720C		550 gal
5L	Locomotive Shop – diesel fuel tank	9 VAC 5-80-720C		500 gal
6L	Locomotive Shop – air compressed oil tank	9 VAC 5-80-720C		550 gal
7L	Locomotive Shop – air compressed oil tank	9 VAC 5-80-720C		550 gal
8L	Locomotive Shop – diesel fuel tank	9 VAC 5-80-720C		500 gal
9L	Locomotive Shop – used oil tank	9 VAC 5-80-720B	VOC	
10L	Locomotive Shop – air compressed oil tank	9 VAC 5-80-720C		400 gal
11L	Locomotive Shop – used oil tank	9 VAC 5-80-720B	VOC	
12L	Locomotive Shop – diesel fuel tank	9 VAC 5-80-720B	VOC	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80- 720 C)
13L	Locomotive Shop – gasoline tank	9 VAC 5-80-720C		500 gal
Н	Locomotive Shop – Polymar 607 tank	9 VAC 5-80-720C		500 gal
P	Locomotive Shop – F.O. 2223 tank	9 VAC 5-80-720C		500 gal
F	Locomotive Shop – F.O. 537 tank	9 VAC 5-80-720C		500 gal
С	Locomotive Shop – BP 5229 tank	9 VAC 5-80-720C		500 gal
Bldg 28	Fabrication Shop – load testing East End	9 VAC 5-80-720A		
Bldg 28	Fabrication Shop – load testing West End	9 VAC 5-80-720A		
28-02	Fabrication Shop – plasma burning table	9 VAC 5-80-720B	PM, PM-10	
Bldg 29	Locomotive Shop – sanding tables (2)	9 VAC 5-80-720B	PM, PM-10	
Bldg 29	Locomotive Shop – sanding/polishing booth	9 VAC 5-80-720B	PM, PM-10	
Bldg 29	Locomotive Shop – brick saw	9 VAC 5-80-720B	PM, PM-10	
Bldg 29	Locomotive Shop – OSI electric drying oven	9 VAC 5-80-720A		
Bldg 67	Signal Shop – Emergency Generator	9 VAC 5-80-720A	NOx	115 KW
Bldg 67	Signal Shop – shot blaster	9 VAC 5-80-720B	PM, PM-10	
Bldg 67	Signal Shop – general welding	9 VAC 5-80-720A		
Bldg 67	Signal Shop – dip tank	9 VAC 5-80-720C		500+ gal
67-01	Signal Shop – old paint booth #1	9 VAC 5-80-720B	PM, PM-10, VOC, HAPs	
67-03	Signal Shop – Safety Kleen parts washer	9 VAC 5-80-720A		

These insignificant emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, record keeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

X. Compliance Plan

Not applicable.

XI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
6/30/95 permit, as amended 1/19/96 & 6/14/01	Unit Ref. #41-03 - New Paint Shop – drying booth (steam heat)	Drying now takes place with steam heat rather than nat. gas dryer; references to "dryer" are therefore being removed from permit due to negligible emissions from drying (see also list of insignificant activities)

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

XII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
 - (9 VAC 5-80-110 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

- (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than <u>March 1</u> each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, West Central Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3. of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, West Central Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, West Central Regional Office. (9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- The permittee shall furnish to the Board, within a reasonable time, any information
 that the Board may request in writing to determine whether cause exists for
 modifying, revoking and reissuing, or terminating the permit or to determine
 compliance with the permit. Upon request, the permittee shall also furnish to the
 Board copies of records required to be kept by the permit and, for information
 claimed to be confidential, the permittee shall furnish such records to the Board along
 with a claim of confidentiality.
 (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

 (9 VAC 5-80-110 K.1)

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M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring

results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for

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such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

XIII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

A. Limitations

1. **Throughput** – The throughput for spray booth (29-01) shall not exceed 3,745 gallons per year, calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-10 H, 9 VAC 5-80-110 and C. 20 of 9/27/99 Permit as amended 6/15/01)

2. **Throughput** - The annual throughput of each particulate toxic compound, calculated using TLV values obtained from the ACGIH, 1991 – 1992 edition for the paint spray booth and associated dryer (41-02) during any period of 12 consecutive months, shall not exceed the limitations specified below:

for particulate toxic compounds having a TLV-TWA, the annual throughput of any particulate toxic compound, in tons per year, shall not exceed 160.62 x TLV-TWA

In no event shall the throughput of any particulate toxic compound result in particulate emissions in excess of the maximum annual particulate emission limitation.

(9 VAC 5-80-110, 9 VAC 5-170-160 and C. 26 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

- 3. **Throughput** The annual throughput of each volatile toxic compound, calculated using the TLV values obtained from the ACGIH, 1991 1992 edition for the paint spray booth and associated dryer (41-02) during any period of 12 consecutive months, shall not exceed the limitations specified below:
 - a. for volatile toxic compounds having a TLV-TWA, the annual throughput of any volatile toxic compound, in tons per year, shall not exceed 5.51 x TLV-TWA

In no event shall the throughput of any volatile toxic compound exceed the maximum annual volatile organic compound limitations in Title V Conditions V. A. 12 & 13. (9 VAC 5-80-110, 9 VAC 5-170-160 and C. 27 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

4. **Operational Procedures -** For spray booth (41-02), the permittee is limited to use of the following particulate and volatile toxic compounds as listed in the NSR permit application dated June 2, 1995 including amendments dated June 13, 16, 19, 20, and 23, 1995:

Particulate Toxic Compounds

Maximum Concentration

(% by weight or parts per million by weight)

Aniline	0.5 ppmw
Arsenic Compounds	25.6 ppmw
Cadmium Compounds	3.5 ppmw
Chromium Compounds	1.0 ppmw
Cobalt Compounds	0.2 %
Lead Compounds	30.0 ppmw
Mercury Compounds	0.001 ppmw
Nickel Compounds	117.1 ppmw

Volatile Toxic Compounds Maximum Concentration

(% by weight or parts per million by weight)

12.3 %

Ethyl Benzene	2.4 %
Formaldehyde	0.07 %
Glycol Ethers	5.0 %
EP glycol ether	
Propylene glycol T-butyl ether	
Propylene glycol glycidyl ether	
Methyl Ethyl Ketone	6.1 %
Toluene	2.4 %

Xylene

The permittee may use additional particulate and volatile toxic compounds under 9 VAC 5-50-160 D of State Regulations without obtaining a new permit provided the following conditions are met:

- a. Notification shall be given to the Director, West Central Regional Office. Such notification shall be made within fifteen days after the use of the additional particulate and/or volatile toxic compounds and shall include identification of the toxic compound, the date the toxic compound was first used, the anticipated maximum throughput of that compound in lbs/hr and tons/yr, and calculations demonstrating that the anticipated maximum throughput does not exceed the limitations given in the 6/30/95 Permit, as amended 1/19/96 & 6/14/01. Additional details of the notification should be arranged with the Director, West Central Regional Office.
- b. The permittee shall operate this facility in compliance with 9 VAC 5, Chapter 40, Part II, Article 3 and 9 VAC 5, Chapter 50, Part II, Article 3 for all particulate and volatile toxic compounds. Use of any additional toxic compound is prohibited if it results in a lower control efficiency for emission control equipment required by the conditions of this permit or if the control equipment creates toxic compound emissions not exempt under 9 VAC 5, Chapter 50, Part II, Article 3 of State Regulations.
- c. Use of any toxic compound subject to federal regulation as a hazardous air pollutant may subject the facility to additional permitting requirements in accordance with 40 CFR 61 and 40 CFR 63.
- d. Discontinuation of previously permitted toxic compounds and the use of additional particulate and volatile toxic compounds shall not exempt the permittee from applicable federal regulation for hazardous air pollutants under 40 CFR 61 and 40 CFR 63.
- e. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional particulate and volatile toxic compounds may result in enforcement action.

(9 VAC 5-50-200, 9 VAC 5-170-160, and C. 28 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

- 5. **Operational Procedures -** The toxic compound currently in use in the spray booth (29-01) and having the potential of being emitted at the rate of one half ton or more per year is Toluene (CAS #108-88-3). The permittee may use additional particulate and volatile toxic compounds under 9 VAC 5-50-160 D of State Regulations without obtaining a new permit provided the following conditions are met:
 - a. Notification shall be given to the Director, West Central Regional Office. Such notification shall be made within fifteen days after the use of the additional toxic compounds and shall include identification of the toxic compound, the date the toxic compound was first used, the anticipated maximum throughput of that compound in lbs/hr and tons/yr, and calculations demonstrating that the anticipated maximum throughput does not exceed the limitations given in the 9/29/99 Permit as amended 6/15/01.
 - b. The permittee shall operate this facility in compliance with 9 VAC 5, Chapter 40, Part II, Article 3 and 9 VAC 5, Chapter 50, Part II, Article 3 for all toxic compounds. Use of any additional toxic compound is prohibited if it results in a lower control efficiency for emission control equipment required by the conditions of this permit or if the control equipment creates toxic compound emissions not exempt under 9 VAC 5, Chapter 50, Part II, Article 3 of State Regulations.
 - c. Use of any toxic compound subject to federal regulation as a hazardous air pollutant may subject the facility to additional permitting requirements in accordance with 40 CFR 61 and 40 CFR 63.
 - d. Discontinuation of previously permitted toxic compounds and the use of additional particulate and volatile toxic compounds shall not exempt the permittee from applicable federal regulation for hazardous air pollutants under 40 CFR 61 and 40 CFR 63.
 - e. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional particulate and volatile toxic compounds may result in enforcement action.

(9 VAC 5-80-11 and C. 23 of 9/27/99 Permit as amended 6/15/01)

- 6. Emission Limits Emissions of each particulate toxic compound, calculated using TLV values obtained from the ACGIH, 1991 – 1992 edition for the spray booth and associated dryer (41-02), shall not exceed the hourly limitations specified below:
 - a. for particulate toxic compounds having a TLV-C, emissions of any particulate toxic compound, in pounds per hour, shall not exceed 0.56 x TLV-C;

- d a TLV-TWA.
- b. for particulate toxic compounds having both a TLV-STEL and a TLV-TWA, emissions of any particulate toxic compound, in pounds per hour, shall not exceed 0.56 x TLV-STEL;
- c. for particulate toxic compounds having only a TLV-TWA, emissions of any particulate toxic compound, in lbs per hour, shall not exceed 1.12 x TLV-TWA

In no event shall emissions of any particulate toxic compound exceed the maximum hourly particulate emission limitations.

(9 VAC 5-50-180 and C. 30 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

- 7. **Emission Limits** Emissions of each volatile toxic compound, calculated using TLV values obtained from the ACGIH, 1991 1992 edition for the spray booth and associated dryer (41-02), shall not exceed the hourly limitations specified below:
 - a. for volatile toxic compounds having a TLV-C, emissions of any volatile toxic compound, in pounds per hour, shall not exceed 0.56 x TLV-C;
 - b. for volatile toxic compounds having both a TLV-STEL and a TLV-TWA, emissions of any volatile toxic compound, in pounds per hour, shall not exceed 0.56 x TLV-STEL;
 - c. for volatile toxic compounds having only a TLV-TWA, emissions of any volatile toxic compound, in lbs per hour, shall not exceed 1.12 x TLV-TWA

In no event shall emissions of any volatile toxic compound exceed the maximum hourly volatile organic compound limitations.

(9 VAC 5-50-180 and C. 31 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

- 8. **Emission Limits -** Emissions of each particulate toxic compound, calculated using TLV values obtained from the ACGIH, 1991 1992 edition for the spray booth and associated dryer (41-02) during any period of 12 consecutive months, shall not exceed the annual limitations specified below:
 - a. for particulate toxic compounds having a TLV-TWA, emissions of any particulate toxic compound, in tons per year, shall not exceed 5.51 x TLV-TWA

In no event shall emissions of any particulate toxic compound exceed the maximum annual particulate emission limitation.

(9 VAC 5-50-180 and C. 32 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

- 9. **Emission Limits -** Emissions of each volatile toxic compound, calculated using TLV values obtained from the ACGIH, 1991 1992 edition for the spray booth and associated dryer (41-02) during any period of 12 consecutive months, shall not exceed the annual limitations specified below:
 - a. for volatile toxic compounds having a TLV-TWA, emissions of any volatile toxic compound, in tons per year, shall not exceed 5.51 x TLV-TWA

In no event shall emissions of any volatile toxic compound exceed the maximum annual volatile organic compound limitations.

(9 VAC 5-50-180 and C. 33 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

10. **Emission Limits -** Emissions from the operation of the paint spray booth and associated dryer (41-02) shall not exceed the limits specified below:

Cobalt	0.044 lbs/hr	0.022 tons/yr
Glycol Ethers	63.0 lbs/hr	
Formaldehyde	0.55 lbs/hr	0.28 tons/yr
Xylene	96.1 lbs/hr	48.0 tons/yr

(9 VAC 5-50-180, 9 VAC 5-50-260 and C. 29 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01)

11. **Emission Limits** – All Hazardous Air Pollutant (HAP) emissions from the operation of the Binks paint booth, (42-04) shall not exceed the levels resulting from the exemption formulas specified in 9-VAC-5-80-11 Subpart I, calculated based on TLV values obtained from the ACGIH, 1991-1992 edition.

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-50-180, 9 VAC 5-50-260 and C. 15 of 3/10/98 Permit as amended 6/13/01)

12. **Emission Limits -** Emissions from toxic substances (spray booth 29-01) shall remain below the following exemption formulas, calculated using TLV values obtained from the ACGIH, 1991-1992 edition:

For toxic pollutants with a TLV-CR:

Exempt Emission Rate (pounds per hour) = TLV-CR (mg/m^3) x 0.033

For toxic pollutants with both a TLV-STELR and a TLV-TWAR:

Exempt Emission Rate (pounds per hour) = TLV-STELR $(mg/m^3) \times 0.033$ Exempt Emission Rate (tons per year) = TLV-TWAR $(mg/m^3) \times 0.145$

For toxic pollutants with only a TLV-TWAR:

Exempt Emission Rate (pounds per hour) = TLV-TWAR (mg/m^3) x 0.066 Exempt Emission Rate (tons per year) = TLV-TWAR (mg/m^3) x 0.145

(9 VAC 5-80-11 I, 9 VAC 5-50-180, 9 VAC 5-50-260 and C. 22 of 9/27/99 Permit as amended 6/15/01)

13. **Emission Limits -** Emissions from the operation of the spray booth (29-01) shall not exceed the limits specified below:

Toluene

1.0 tons/yr

(9 VAC 5-80-110, 9 VAC 5-50-260 and C. 21 of 9/27/99 Permit as amended 6/15/01)

B. Monitoring and Record keeping

- 1. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the air pollution control equipment and maintain records of inspection results.
 - c. Have available written operating procedures for the air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Maintain an inventory of spare parts that are needed to maintain the air pollution control equipment in proper working order.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20E, 9 VAC 5-50-20E)

- 2. **On-Site Records** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. Daily and annual throughput (in gallons) of coatings at each booth (41-02). Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - b. Monthly and annual toxic pollutant emissions (in pounds) from paint spray booth (41-02). Annual emissions shall be calculated as the sum of each consecutive 12 month period.
 - c. Average monthly VOC emissions (in pounds/gallon) from paint spray booth (41-02).
 - d. Monthly and annual VOC emissions (in pounds) from spray booth (41-02) Annual emissions shall be calculated as the sum of each consecutive 12 month period.
 - e. The number of hours of operation of spray booth (41-02)
 - f. The number of rail cars painted at the facility. Annual throughput shall be calculated as the sum of each consecutive 12 month period.
 - g. Daily and annual toluene emissions (in pounds) from the spray booth (29-01). Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
 - h. Annual throughput (in gallons) for the spray booth (29-01). Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
 - i. The yearly consumption of each individual paint, solvent and thinner used at the Binks spray booth (42-04), calculated monthly as the sum of each consecutive 12 month period.
 - j. The number of hours of operation corresponding to each paint, solvent and thinner used in the Binks spray booth (42-04).

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These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, C. 22 of 6/30/95 Permit, as amended 1/19/96 & 6/14/01, C. 24 of 9/27/99 Permit as amended 6/15/01 and C. 16 of 3/10/98 Permit as amended 4/13/01)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-40-30, 9 VAC 5-50-30 and 9 VAC 5-80-110)